

We claim:

1. A process for preparing tetrahydrogeranylacetone in which a
5 liquid phase comprising at least 90% by weight of
pseudoionone and in which particles of a catalyst which is
capable of preferentially hydrogenating carbon-carbon double
bonds over carbon-oxygen double bonds, and the active
10 component of which comprises palladium are suspended, is
conducted through a device which inhibits the transport of
the catalyst particles in the presence of a
hydrogen-containing gas.
2. A process as claimed in claim 1 , wherein the device
15 inhibiting the transport of the catalyst particles has
orifices or channels whose hydraulic diameter is from 2 to
2000 times the average diameter of the catalyst particles.
3. A process as claimed in any of the preceding claims, wherein
20 catalyst particles having an average diameter of from 0.0001
to 2 mm are used.
4. A process as claimed in any of the preceding claims, wherein
25 the device used for inhibiting the transport of the catalyst
particles is a dumped packing, a knit, an open-celled foam
structure or a structured packing element.
5. A process as claimed in any of the preceding claims, wherein
30 the liquid phase and the hydrogen-containing gas are
conducted through the device which inhibits the transport of
the catalyst particles at a superficial velocity of more than
100 m³/m²h.
6. A process as claimed in any of the preceding claims, wherein
35 the surfaces of the device facing toward the liquid phase
have a roughness in the range from 0.1 to 10 times the
average diameter of the catalyst particles.
7. A process as claimed in any of the preceding claims, wherein
40 the reaction pressure is from 1 to 100 bar.
8. A process as claimed in any of the preceding claims, wherein
the reaction temperature is from 20 to 120°C.

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9. A process as claimed in any of the preceding claims, wherein the reaction pressure is from 1 to 100 bar.
10. A process as claimed in any of the preceding claims, wherein
5 the reaction temperature is from 20 to 120°C.

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